

CLOSED LOOP EMBEDDED AUDIO TRANSMISSION LINE TECHNOLOGY FOR LOUDSPEAKER ENCLOSURES AND SYS- TEMS[Insert title of invention]

Abstract

An acoustic impedance matching enclosure is provided having a driver loaded into a chamber buffering the throat/mouth of a closed loop transmission line. Transmission line consists of a termination member, outer and inner enclosure walls, high-density lining and throat/mouth area. Transmission line eliminates internal random standing waves while providing variable-frequency standing waves that through superposition of the waves compensates for mass-acceleration loss of the high-end of the driver output while damping the resonance of the driver. Alternative application of the acoustic impedance matching enclosure is that of compression loading the driver directly into the closed loop transmission line and using an acoustic low pass filter to translate the output into low frequencies only through a port. Both applications of the acoustic impedance matching enclosure are to insure that

the drivers' diaphragm is clear of disruptive internal standing waves, properly loaded at all frequencies and not easily affected by room reflections.